

**REMARKS**

Claims 1-28 are pending. Claims 1, 9, 19, and 24 are in independent form.

In the action mailed September 19, 2005, claims 19-23 were allowed and claims 2 and 15 were indicated as containing allowable subject matter. The indication of patentable subject matter is appreciatively noted.

Claims 4-7 were rejected under 35 U.S.C. § 112, second paragraph as indefinite. Claims 4 and 5 have been amended to address the Examiner's concerns.

**Claim 1**

Claim 1 was rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent Publication No. 2002/0181624A1 to Gonzalez et al. (hereinafter "Gonzalez") and U.S. Patent No. 6,754,251 to Sriram et al. (hereinafter "Sriram").

Claim 1 relates to a method of normalizing an output of a receiver. The method includes determining a normalization factor using a determined variance of multiple access interference, and applying the normalization factor to the output of the receiver.

Gonzalez and Sriram neither describe nor suggest the application of a normalization factor that is determined using a determined variance of multiple access interference to the output of a receiver.

As discussed in the response filed August 3, 2005, Gonzalez uses a final channel estimate that is the linear combination of pilot-aided and data-aided channel estimates and the variances of those estimates. Gonzalez thus does not determine the variance of multiple access interference, nor is a normalization factor determined using such a variance of multiple access interference applied to the output of a receiver.

Sriram also does not determine the variance of multiple access interference. Instead, Sriram describes that the output of his code scheme is to be simulated using a total variance N. See *Sriram*, col. 17, line 44 and col. 18, line 7-18. This total variance N represents the contributions of a variety of different noise sources, namely "thermal noise, inter- and intra-cell interference, and cross-correlation among different PN sequences, or their shifts." See *Sriram*, col. 18, line 16-19.

Since Sriram only simulates the output of his code scheme using a model total variance N, the variance of multiple access interference is not determined. Rather, total variance N is Sriram's hypothetical guess at the net effects of a variety of

different noise sources. One of ordinary skill who read Sriram would not discover how to determine the variance of multiple access interference. Rather, such a person would simply learn how to estimate the impact of a number of different noise sources that have been lumped together as a total variance N.

Since Sriram does not describe how the variance of multiple access interference is to be determined, Sriram also does not describe or suggest applying a normalization factor determined using such a variance of multiple access interference to the output of a receiver. Since Gonzalez also does not describe this, a *prima facie* case of obviousness has not been established. The rejections of claim 1 and the claims dependent therefrom should therefore be withdrawn.

#### Claim 9

Claim 9 was rejected under 35 U.S.C. § 103(a) as obvious over Gonzalez and Sriram.

Claim 9 relates to a receiver. The receiver includes a detector, a metric correction section, and a channel decoder. The detector receives transmitted information and provides one or more output symbols based on the transmitted information. The metric correction section normalizes the one or more output symbols to obtain one or more metrics. The normalization is based on a determined variance of multiple access interference. The channel decoder receives the one or more metrics from the

metric correction section and utilizes the one or more metrics to decode the transmitted information.

Neither Gonzalez nor Sriram describes or suggests a normalization that is based on a determined variance of multiple access interference. Gonzalez' final channel estimate is the linear combination of pilot-aided and data-aided channel estimates and the variances of those estimates. Sriram describes that the output of his code scheme is to be simulated using a model total variance  $N$  that represents the contributions of a variety of different noise sources.

Since neither Gonzalez nor Sriram describes or suggests elements and/or limitations of claim 9, a *prima facie* case of obviousness has not been established. The rejections of claim 9 and the claims dependent therefrom should therefore be withdrawn.

Claim 24

Claim 24 was rejected under 35 U.S.C. § 103(a) as obvious over Gonzalez and Sriram.

Claim 24 relates to a method that includes receiving a symbol, determining a normalization factor for the symbol using a determined variance in a level of multiple access interference for the symbol, normalizing the symbol with the normalization factor, and providing the normalized symbol to a channel decoder.

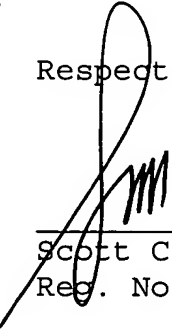
As discussed above, neither Gonzalez nor Sriram determines the variance of multiple access interference. Therefore, neither Gonzalez nor Sriram describes or suggests determining a normalization factor for the symbol using a determined variance in a level of multiple access interference for the symbol.

Since neither Gonzalez nor Sriram describes or suggests elements and/or limitations of claim 24, a *prima facie* case of obviousness has not been established. The rejections of claim 24 and the claims dependent therefrom should therefore be withdrawn.

Applicant asks that all claims be allowed. No fees are believed due at this time. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: November 23, 2005

  
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